

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of

Telephone Number Portability; North
American Numbering Plan Administration;
Numbering Resource Optimization

CC Docket Nos. 95-116, 92-237, 99-
200

E911 Requirements for IP-Enabled Service
Providers

WC Docket No. 05-196

Telecommunications Relay Services and
Speech-to-Speech Services for Individuals
with Hearing and Speech Disabilities

WC Docket No. 03-123

COMMENTS OF TELCORDIA D/B/A ICONECTIV

John T. Nakahata
Mark D. Davis
John R. Grimm
Yuxi Tian
HARRIS, WILTSHIRE & GRANNIS LLP
1919 M Street NW, Eighth Floor
Washington, DC 20036
*Counsel for Telcordia Technologies, Inc.
d/b/a iconectiv*

March 9, 2017

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INTRODUCTION AND SUMMARY

Telcordia Technologies, Inc., d/b/a iconectiv (“iconectiv”) hereby submits these comments in response to Neustar, Inc. (“Neustar”)’s Request to Approve New Ownership of the Numbering Administrator (“Request”).¹ Neustar has not actually sought approval for its new ownership in its role as Local Number Portability Administrator (“LNPA”), even though Neustar holds that designation pursuant to Section 251(e) of the Communications Act of 1934, as amended. Neustar cannot continue to serve as LNPA without such approval. Finally, the Commission should ensure that Neustar under its new owners fully cooperates to ensure a smooth and timely LNPA transition.

SUMMARY

As Neustar acknowledges, in order to continue functioning as any numbering administrator designated by the Commission pursuant to Section 251(e), Neustar must be neutral. That means not being affiliated with a telecommunications service provider, including an interconnected VoIP provider, and not being subject to undue influence by such a provider. Moreover, as a numbering administrator, Neustar operates critical infrastructure, as Neustar itself noted as part of the Commission’s most recent consideration of designation of an LNPA. Accordingly, consistent with precedent, the Commission should also consider whether Neustar’s change of ownership raises national security issues across any of Neustar’s numbering administration roles, including LNPA, North American Numbering Plan Administrator, Pooling Administrator, and Telecommunications Relay Service Numbering Administrator.² This is

¹ Request of Neustar, Inc. to Approve New Ownership of the Numbering Administrator, WC Docket No. 05-196 et al. (filed Jan. 31, 2017) (“Request”).

² These are not the only security-sensitive roles Neustar performs. Neustar also has a substantial business that it has heavily promoted providing internet security and

particularly important here because the Government of Singapore, through Hux Investment Pte. Ltd. (“Hux”), will be an indirect owner, or ownership manager, of up to approximately 37.5 percent of Neustar. As it has done with respect to iconectiv’s LNPA designation, the Commission should consult its Federal Partners with respect to these issues, as well as conduct its own review.

Neustar’s Request fails to provide sufficient detail to enable the Commission to assess neutrality or national security implications. With respect to neutrality, Neustar appears not fully to disclose all direct or indirect U.S. telecommunications service provider affiliates of Hux, GIC Special Investments Pte. Ltd., and GIC Private Limited (collectively “GIC Investors”), nor does Neustar disclose that GIC holds an indirect interest in China Telecom (Americas) Corp., a U.S. telecommunications service provider. Neustar does not actually disclose the owner of Hux, which is likely directly or indirectly the Government of Singapore since GIC’s “relationship with the government” of Singapore “is that of a fund manager to a client.”³ GIC itself is “wholly owned by the Government of Singapore.”⁴ The Government of Singapore also owns another company, Temasek, through which it has invested in U.S. telecommunications service providers. Because Temasek would be an entity under common ownership with GIC, and thus Hux, Temasek’s direct and indirect holdings in U.S. telecommunications service providers, which

cybersecurity protection services. See DDoS Protection Solutions, Neustar, <https://www.neustar.biz/security/ddos-protection> (last visited March 6, 2017). All of these are also subject to potential foreign government influence and control—including direct involvement of Board of Directors members appointed.

³ See GIC INVESTOR FAQs, <http://www.gic.com.sg/faq> (FAQ #3, “What is the relationship between GIC and the government?”) (last visited Mar. 3, 2017).

⁴ *Id.*

include Bharti Airtel (USA) Ltd., Level 3 Communications, LLC, and its affiliates Singapore Telecom USA, Inc., and StarHub, Inc., would be potentially relevant to a neutrality analysis.

Furthermore, Neustar's Request does not include a complete set of neutrality safeguards. Neustar appears to abandon the neutrality Code of Conduct—including its independent director, numbering administration employee neutrality, information sharing, nondiscrimination and audit requirements—even though GIC is apparently affiliated with U.S. telecommunications service providers. Neustar states that all shareholder voting for Neustar directors will be exercised by a voting trust controlled by Golden Gate—for which it proposes the trustees may be Golden Gate employees rather than independent trustees. But it also states that the General Partner, Aerial Topco GP Corp., whose employees will be the voting trustees, will have two directors designated by the GIC Investor, and, without the Code of Conduct, Neustar apparently has abandoned any proscriptions on information sharing with these directors.

Neustar does not address at all the security implications of its proposed ownership change. Neustar itself has highlighted the importance of the LNPA, among other numbering administration functions, as critical infrastructure.⁵ Yet Neustar fails to explain what protections it will have in place to ensure that its foreign government owners do not get access to security-sensitive information, including with respect to law enforcement requests that it receives as the LNPA.⁶

⁵ See, e.g., Reply Comments of Neustar, Inc., at 79, 85, WC Docket No. 09-109, CC Docket No. 95-116 (emphasizing the importance of the LNPA to “the day-to-day functioning of the nation’s telecommunications as well as in times of emergency” and warning that “to the extent that a foreign-controlled LNPA is influenced by a foreign entity, the opportunity exists for further economic and foreign espionage by a foreign nation-state” (internal quotations omitted)).

⁶ iconectiv’s LNPA system is subject to significant security-related specifications and requirements. It is not clear whether Neustar’s system meets those standards, and thus, the

In any event, the Commission should ensure that Neustar, under its new owners, will be committed to completing, and cooperating with, the ongoing LNPA transition, according to the schedule established by the Transition Oversight Manager. Neustar’s new owners likely have a substantial financial interest in operating the LNPA for as long as possible—to the detriment of consumers and telecommunications service providers. The Commission should ensure that the new owners understand their responsibilities to ensure Neustar carries through with the transition cooperatively.

ARGUMENT

Neustar’s proposed acquisition raises neutrality and security concerns that Neustar has insufficiently addressed. The Commission should require Neustar to provide additional information to allow a proper evaluation of its proposal, and whatever action the Commission takes, it should ensure Neustar, under its new owners, cooperates with the LNPA transition.

I. NEUSTAR’S PROPOSED ACQUISITION RAISES NEUTRALITY AND NATIONAL SECURITY QUESTIONS THAT NEUSTAR HAS NOT ADEQUATELY DISCLOSED OR ADDRESSED.

Neustar’s Request omits key information that is relevant to assessing how the proposed transaction will affect national security and Neustar’s neutrality. Among other things, Neustar’s Request fails to disclose that one of its proposed corporate parents—Hux Investment Pte. Ltd. (“the GIC Investor”)—will apparently be owned by the Government of Singapore. Neustar further fails to disclose that the Government of Singapore, through various investment vehicles, holds indirect stakes in a number of U.S. telecommunications service providers, raising questions about neutrality.

potential for foreign agent access may be higher, particularly when combined with foreign government ownership.

Neustar compounds the problem by providing only a vague and cursory description of the voting trust that it proposes to create in order to insulate itself from the Government of Singapore. Neustar asks the Commission to conclude that this voting trust, alone, cures the neutrality and security concerns raised by the proposed transaction and that “[t]he other safeguards used by the Commission in the past ‘are not pertinent’ to this transaction because similar ‘issues are not present here.’”⁷ But without a more complete disclosure of the potential neutrality issues raised by this transaction and the terms of the voting trust that Neustar proposes to create to address those concerns, it is impossible for the Commission—or anyone else—to evaluate whether that is true. And it seems apparent in any event that the voting trust does not prevent all information sharing and other neutrality issues that the Code of Conduct and periodic neutrality audits addressed.

A. Neustar Has Not Adequately Disclosed GIC’s Affiliation with the Singapore Government and U.S. Telecommunications Service Providers.

Although Neustar acknowledges that one of its proposed new parents—the GIC Investor—is affiliated with a telecommunications service provider, it alleges that the proposed transaction raises no neutrality concerns because, under *Warburg*, this affiliation “cannot be attributed to Neustar.”⁸ Regardless of whether Neustar will technically be an affiliate of a telecommunications service provider under *Warburg*, the Commission must also be satisfied that the new ownership structure will not subject Neustar to undue influence by an entity with a vested interest in numbering administration.⁹ Therefore, the Commission must evaluate the proposed new owners’ relationships with telecommunications service providers and determine

⁷ Request at 10.

⁸ *Id.* at 7 n.14.

⁹ 47 C.F.R. § 52.12(a)(1)(iii).

whether those relationships may subject Neustar to undue influence not addressed by their proposed voting trust.

Unfortunately, however, Neustar's Request omits or obfuscates key facts that likely would be relevant to the neutrality analysis. First, Neustar does not explicitly state who will be the ultimate owner of the 37.5 percent equity interest managed by the GIC Investor. Neustar states only that the GIC Investor will be "managed by GIC Special Investments Pte. Ltd., which is an arm of GIC Private Limited ("GIC")."¹⁰ But as GIC explains on its website, "GIC is a fund manager, not an owner of the assets."¹¹ The owner of all assets managed by GIC is the Government of Singapore.¹² Thus, although Neustar never explicitly so states, Neustar is apparently proposing to be indirectly acquired in significant part by the Government of Singapore:

¹⁰ Request at 5.

¹¹ GIC INVESTOR FAQs , <http://www.gic.com.sg/faq> (FAQ # 5, "What is GIC's source of funds?") (last visited Mar. 03, 2017).

¹² *See id.*

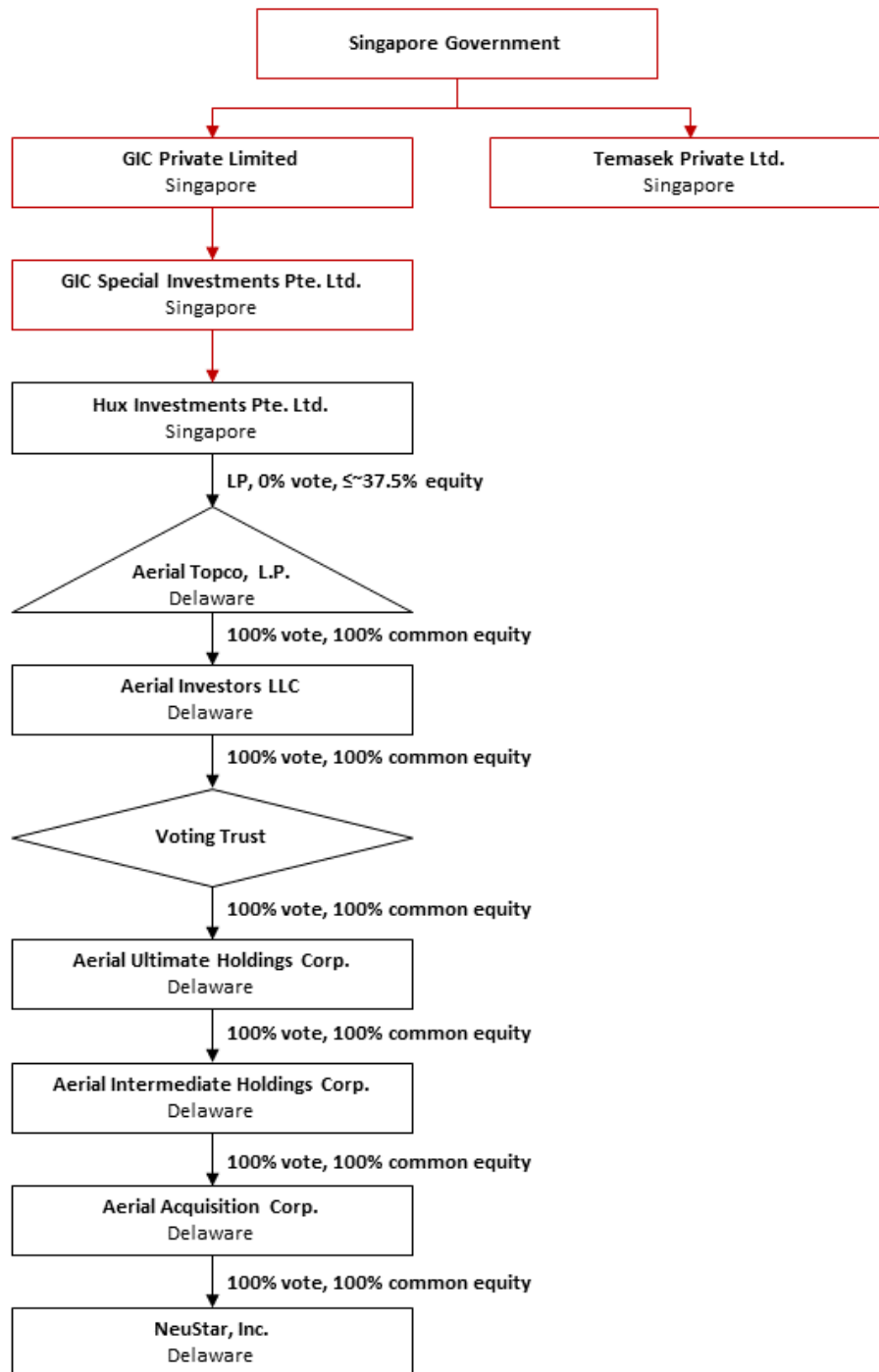


Figure 1

Of course, the acquisition of critical U.S. telecommunications infrastructure by a *foreign government* raises questions about national security, as discussed in more detail in Part I.B, *infra*. Neustar’s application does not even address these issues.

Second, Neustar’s application also omits key information necessary to evaluate how its ownership by the Government of Singapore will affect its neutrality. Neustar’s application discloses that the GIC Investor is “under common control with” an entity that owns a U.S. telecommunications service provider, implicitly suggesting that Neustar has provided a full disclosure of the relationships that its proposed new parents will have with U.S. telecommunications service providers.¹³ But even a quick look at publicly available information demonstrates that Neustar’s disclosure is incomplete. For example, Neustar does not mention that through GIC, the Government of Singapore holds indirect interests in China Telecom (Americas) Corp, a provider of telecommunications services in the United States.¹⁴ And Temasek Holdings—another wealth fund owned fully by the Government of Singapore—holds indirect ownership interests in a number of U.S. telecommunications service providers, including Bharti Airtel (USA) Ltd., Level 3 Communications, LLC, and its affiliates Singapore Telecom USA, Inc., and StarHub, Inc. (*see* Figure 2, below).¹⁵

¹³ Request at 5.

¹⁴ *See* SCHEDULE 13G/A FOR CHINA TELECOM CORPORATION LTD., <https://www.sec.gov/Archives/edgar/data/936828/000119312517021469/d338080dsc13ga.htm> (last visited Mar. 03, 2017).

¹⁵ *See* MAJOR INVESTMENTS, http://www.temasek.com.sg/portfolio/portfolio_highlights/major_portfoliocompanies (last visited Mar. 03, 2017); *see also* ST TELEMEDIA’S PORTFOLIO, <http://www.sttelemedia.com/portfolio/> (last visited Mar. 03, 2017).

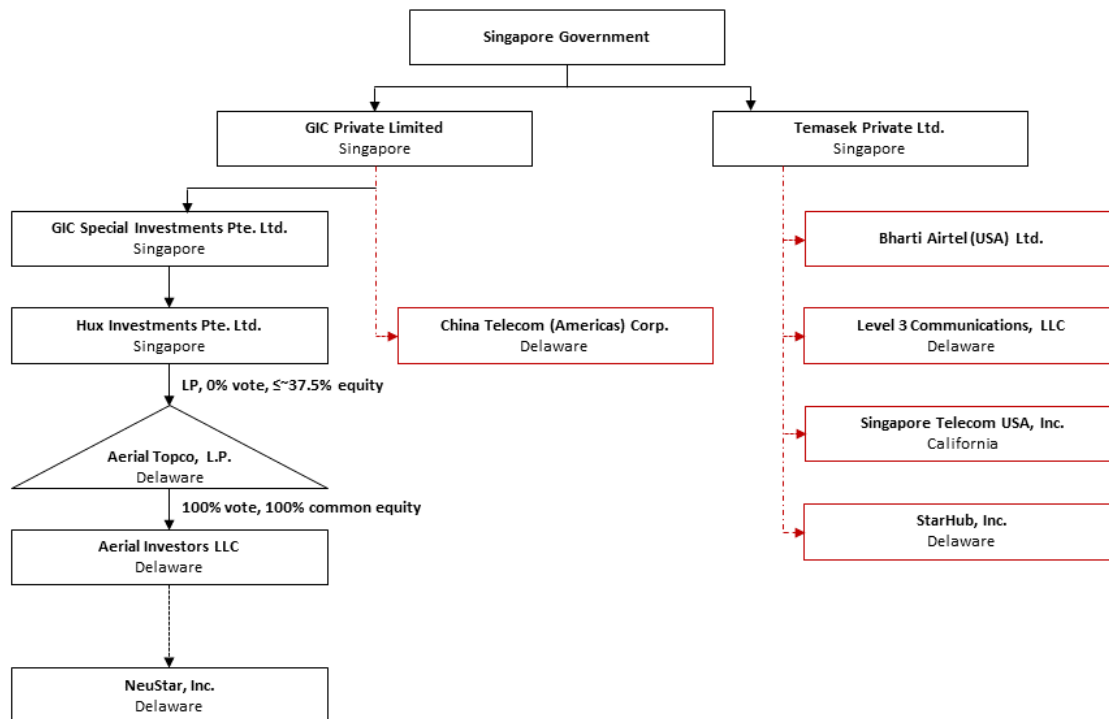


Figure 2¹⁶

This list itself may well be incomplete. GIC states that “[w]e do not report on investment specifics, to safeguard our competitive edge,” nor does GIC reveal the size of the assets it manages for the Government of Singapore because doing so “is not in the national interest” and would “make it easier for markets to mount speculative attacks on the Singapore dollar during periods of vulnerability.”¹⁷ As a result, in light of the already apparently incomplete disclosures of U.S. telecommunications service provider interests, the Commission cannot be sure that it

¹⁶ Dotted lines represent indirect interests.

¹⁷ GIC INVESTOR FAQs, <http://www.gic.com.sg/faq> (FAQ # 16, “Why does GIC not disclose the size of its assets under management?” and FAQ # 18, “What sort of information does GIC make publicly available?”) (last visited Mar. 03, 2017).

knows what other U.S. telecommunications companies the Government of Singapore invests in or how large those shares are. GIC and Temasek have aggressively invested in telecommunications and technology companies: in 2014, the *Financial Times* reported that “GIC and Temasek, have emerged as the biggest state-backed investors in technology, telecoms and ecommerce” and reported that they had “made 24 investments in technology, telecoms and ecommerce groups, worth a total of \$3.1bn, between August 2013 and July” of 2014.¹⁸

The declarations attached to the Request do not provide sufficient additional clarity. The certification signed by Golden Gate closely tracks some of the requirements of 47 C.F.R. §52.12. It states that Golden Gate Capital is not a telecommunications service provider, a VoIP provider, or an iTRS provider.¹⁹ It states that Golden Gate Capital “is not an Affiliate, by common ownership or otherwise,” of such a provider.²⁰ And it states that neither it nor its affiliates “have issued a majority of its debt to, nor does it derive a majority of its revenues from” any single such provider.²¹ By contrast, the certification submitted by the GIC Investor contains almost none of these statements. It states only that the GIC Investor is not itself a telecommunications service provider, VoIP provider, or iTRS provider and that it does not “operate” such a provider.²² Nonetheless, it is clear from publicly available information that the GIC Investor

¹⁸ Jeremy Grant, *Singapore’s Investment Funds Blaze Ecommerce Trail*, FINANCIAL TIMES (Aug. 17, 2014), <https://www.ft.com/content/03df812e-25da-11e4-9bca-00144feabdc0>.

¹⁹ Request at Ex. C.

²⁰ *Id.*

²¹ *Id.*

²² *Id.* at Ex. D.

likely *is* affiliated with at least a few telecommunications service providers, as shown in the chart above.²³

In addition, Neustar admits the possibility of additional owners,²⁴ and even references an affiliate that will be a co-owner, but does not provide further information.²⁵ It is possible that these ownership interests will not pose a problem if the acquisition is consummated, but Neustar must be fully transparent with the Commission so that the Commission may undertake a complete evaluation of the safeguards that are supposed to insulate Neustar from these entities. Even if these owners hold less than a ten percent interest in Neustar, Neustar does not disclose, for example, whether they will have any active participation in management, or some other ability to influence Neustar's actions. Neustar's failure to disclose these relationships, or at least that they are insulated under the Commission's rules, is an impediment to transparent review and prevents the Commission from thoroughly assessing whether Neustar will "be subject to undue influence by parties with a vested interest in the outcome of numbering administration and activities."²⁶

²³ The GIC Investor may have even more U.S. telecommunications service provider relationships, but it is difficult to say because its parent GIC expressly chooses not to disclose information about its investments. Thus, it is even more important for Neustar to be forthcoming about any other direct or indirect affiliations that the GIC Investor may have with a U.S. telecommunications service provider.

²⁴ See Request at 4 n.8 ("Golden Gate Capital may admit additional members to Aerial Investors or additional limited partners to Aerial Topco LP prior to the closing . . .").

²⁵ See *id.* at 5 n.9 ("An affiliate of the GIC Investor, through an investment in GGC Investor, will also indirectly hold no more than approximately 5.3 percent of the equity of Aerial Topco LP.").

²⁶ 47 C.F.R. § 52.12(a)(1)(iii).

B. The Commission Must Thoroughly Vet Neustar's Proposed New Owners and Require Neustar to Provide Additional Information Needed to Adequately Assess This Transaction.

As explained already, the acquisition of Neustar by a foreign government necessitates additional scrutiny to assess security issues. The Commission needs to evaluate whether introduction of a foreign-government-owned significant minority partner introduces security risks to critical infrastructure, including with respect to supply-chain risk management. Neustar's application completely ignores these issues.

Neustar will likely argue that its proposed voting trust mitigates these risks, but on the current record, that is far from clear. First, the General Partner in Aerial Investors, LLC will have on its Board two representatives of the GIC Investor, and thus of the Government of Singapore. Even if these representatives or the GIC Investor have no right to access confidential Neustar information related to security or neutrality, with the apparent elimination of the Code of Conduct there does not appear to be any *prohibition* on such sharing. The proposed voting trust does not govern information sharing.

Second, the voting trust explicitly contemplates GIC rights of board representation, communication, and influence regarding Neustar's non-numbering resources—including its network security, CNAM, domain registry, and other businesses other than numbering. Thus, Neustar's proposal would give the Government of Singapore influence over critical infrastructure within the United States. In considering whether authorizing this transfer of control of its numbering administrators is in the public interest, the Commission should evaluate whether introducing a foreign-government-owned significant minority partner introduces security risks to critical infrastructure.

Third, although Neustar's Neutrality Plan purports to insulate GIC from influencing numbering-related decisions, Neustar's disclosures about its proposed voting trust and its

Neutrality Plan are insufficient and raise serious concerns about the adequacy of Neustar's proposed safeguards. Although Neustar attached a general description of a Neutrality Plan as part of its Request in Exhibit A, Neustar omits the information that would actually permit a review of its neutrality commitments. Neustar does not provide actual terms or covenants for the Neutrality Plan it must adopt as a part of the post-merger organizational documents. As iconectiv was required to do as part of its LNPA selection, Neustar should be required to file the actual terms of its voting trust prior to any action with respect to its Request.²⁷

Moreover, Neustar proposes to appoint employees of GGC to serve as neutral voting trustees. But because GGC and GIC will serve together as members of the Board of Directors of Aerial Topco GP,²⁸ this opens the voting trustees to ongoing communication with, and potentially influence by, GIC. The Commission should therefore require the voting trustees to be independent of GGC to prevent GIC from indirectly influencing the voting trustees.

Finally, Neustar dismisses outright the idea that any other safeguards—such as a Code of Conduct and regular audits by a neutral third party—should be imposed because safeguards the Commission has used in the past “are not pertinent” to this transaction,²⁹ but its argument rings hollow. Neustar claims that additional safeguards are unnecessary because its majority owner will not be affiliated with any telecommunications service provider, iVoIP provider, or iTRS provider.³⁰ But Neustar proposes to be acquired by a significant foreign government investor that also appears to have significant investments in U.S. telecommunications providers. Neustar

²⁷ Neustar also does not include key relevant excerpts from other documents with more specific information.

²⁸ *See id.* at 9.

²⁹ *Id.* at 10.

³⁰ *Id.*

simply does not explain why a Code of Conduct or periodic neutrality audits would not be “pertinent” to ensuring that its minority investor is not exercising improper influence over the company or providing preferential information to its telecommunications service provider affiliates. Indeed, given that GIC and GGC will be sitting on boards together, there is a risk that, without additional conduct safeguards, GIC could exert indirect influence via GGC.

II. THE COMMISSION SHOULD ENSURE THAT NEUSTAR UNDER NEW OWNERSHIP DOES NOT DELAY THE LNPA TRANSITION.

The Commission should ensure that Neustar’s proposed acquisition does not create further incentives or opportunity to impede the transition to the next LNPA, iconectiv.³¹ The Wireline Competition and Public Safety and Homeland Security Bureaus have already noted their concern with delays to the LNPA transition caused in part by Neustar’s behavior.³² Yet rather than reassure the Commission that it takes its transition obligations seriously, Neustar has questioned the extent of its duty to cooperate, and challenged the Bureaus’ authority to oversee it during the transition.³³ Whatever action the Commission takes on Neustar’s request, it should ensure that new ownership does not let Neustar delay the LNPA transition.

Although the *2015 LNPA Selection Order* clearly requires Neustar and iconectiv to “carry out their respective transition responsibilities in good faith and in a reasonable and cooperative

³¹ See generally *Telcordia Techs., Inc. Petition to Reform Amendment 57 & to Order A Competitive Bidding Process for No. Portability Admin.*, 30 FCC Rcd. 3082 ¶ 159 (2015) (“*2015 Order*”) (“Furthermore, the Commission expects Telcordia and Neustar to carry out their respective transition responsibilities in good faith and in a reasonable and cooperative manner.”).

³² See Letter from Matthew DelNero to Lisa Hook, DA 17-28, CC Docket No. 95-116, WC Docket Nos. 07-149, 09-109 (filed Jan. 6, 2017).

³³ See Neustar’s Application for Review, at 11-12, CC Docket No. 95-116, WC Docket Nos. 07-149, 09-109 (filed Jan. 19, 2017).

manner,”³⁴ Neustar has impeded transition activity by questioning its fundamental duty to cooperate with the NAPM. For over a year, Neustar took the position that it was not required to protect the confidential information it must access during the transition, and refused to agree to a reasonable nondisclosure agreement (“NDA”) to keep that information confidential.³⁵ Neustar then publicly claimed that the delays in resolving issues that it had caused could prevent the transition from being completed on schedule, notwithstanding NAPM and TOM reports that the transition remains on schedule.³⁶

Other critical transition steps are coming, with which Neustar cooperation will be necessary. Neustar must begin transferring data necessary for testing in May 2017, and then again for the actual cutovers. In addition, as the NAPM has highlighted in its monthly reports, Neustar cooperation and agreement is required to reach: “An approach and implementation commitment for LNPA transition contingency rollback; Determination of appropriate contractual obligations governing contingency rollback and parallel operations; [and] governance of transition decision-making and resolution of potential disputes.”³⁷ Neustar must also deliver a machine-to-machine interface into its Pooling Administration system through which iconectiv can connect its local number portability database, and needs to do so by dates in the Transition

³⁴ 2015 Order ¶ 159.

³⁵ See Letter from Todd Daubert to Marlene Dortch (filed November 29, 2016); Letter from Todd Daubert to Marlene Dortch (filed December 13, 2016). Unless otherwise indicated, all letters referenced herein were filed in CC Docket No. 95-116 and WC Docket Nos. 07-149 and 09-109.

³⁶ See Number Portability Administration Center Transition Status Report, CC Docket No. 95-116, WC Docket Nos. 07-149, 09-109, at 7 (filed Nov. 18, 2016).

³⁷ Letter from Todd Daubert to Marlene Dortch, at 3, CC Docket No. 95-116, WC Docket Nos. 07-149, 09-109 (filed Feb. 28, 2017).

Plan to avoid a manual workaround that could create potential for human errors and certain capacity limitations.³⁸

The Commission should make clear that under new ownership Neustar’s existing obligations—to cooperate in the LNPA transition—continue. If necessary, the Commission should condition approval of Neustar’s acquisition on Neustar’s new owners’ acknowledging that Neustar has these obligations. The Bureaus have already stated this expectation, but as discussed above, Neustar has challenged their authority to do so.

The Commission should also require Neustar’s new parents to acknowledge the *Commission’s* authority to direct the parties to cooperate in the transition as needed. While it is always hoped that transition disputes can be resolved through other means, the Commission, as the authority that designates numbering administrators, has the authority to direct those administrators in their activities.³⁹ In order to avoid distracting battles over the Commission’s authority, Neustar’s proposed owners should be required to acknowledge the Commission’s authority to craft appropriate remedies to ensure a smooth LNPA transition.

* * *

³⁸ See *id.* (“Approval of a Pooling Change Order is needed for Neustar to start API-related development, and planned development timelines may result in the implementation of the PAS API interface after final acceptance.”).

³⁹ See Telcordia d/b/a iconectiv’s Opposition to Neustar’s Application for Review, at 8, CC Docket No. 95-116, WC Docket Nos. 07-149, 09-109 (filed Feb. 3, 2017).

CONCLUSION

The Commission must require Neustar to provide enough additional information to actually evaluate its proposed acquisition for national security and neutrality, and regardless of the ultimate disposition of Neustar's request, the Commission should clarify the obligations of Neustar and its new parents to cooperate with the LNPA transition.

Respectfully submitted,



John T. Nakahata

Mark D. Davis

John R. Grimm

Yuxi Tian

HARRIS, WILTSHIRE & GRANNIS LLP

1919 M Street NW, Eighth Floor

Washington, DC 20036

Counsel for Telcordia Technologies, Inc.

d/b/a iconectiv

March 9, 2017

CERTIFICATE OF SERVICE

I hereby certify that on March 9, 2017, the foregoing document was served by electronic mail on the following:

Thomas Navin
Wiley Rein LLP
tnavin@wileyrein.com
Counsel to Neustar, Inc.

Meredith S. Senter, Jr.
Lerman Senter PLLC
msenter@lermansenter.com
Counsel to Golden Gate Private Equity, Inc.

/s/ Alexandra Tate